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DNEPROSTROY ASKS GENERATOR IMPROVEMENTS; BULB, TRANSFORMER PRODUCTION UP

SCORE TURBINE DEFECTS -- Leningradskaya Pravda, No 248, 20 Oct 49

The Dnepr GES imeni Lenin has pledged to put into operation this year three turbines instead of the two called for in the plan. It is relying on Leningrad machine-building enterprises to supply the equipment. The machines built by Leningrad plants have proved superior to those imported from the US. They are more productive and can carry heavier loads. Imported driving wheels come in three parts, assembly of which is a very complex operation; on the other hand, Soviet-produced wheels are whole-cast and are much cheaper to mount. Soviet turbine bearings, with their rubber lubricant seals and water lubrication, are infinitely more reliable. Soviet governors are superior to the US product. So are the thrust bearings, which are built in adjustable sections.

However, certain improvements could be made in domestic products. For instance, many plants consign parts that are only partially assembled so that Dneprostroy is compelled on occasion to complete the assembling itself, including the cutting and reaming of a large number of holes. Much time is wasted in assembling parts which have been improperly marked or packed. The work of Dneprostroy would be facilitated if it were provided with the necessary equipment such as reamers, broaching tools, etc.

Both the reliability and ease of repair of generators built by the Elektrosila Plant could be improved by replacing the leads of the excitation cables to the stator terminals with copper bus bars. The cover of the generator should be redesigned to permit climbing inside, and the cover over the pivot-journal /lubricating/ bath should be provided with an inspection hatch. To make it possible to take samples of oil from underneath the thrust bearings, special cranes for lifting up the rotor shaft should be installed. The emergency fire-sprinkler system should have two diametrically opposed feeders.

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The centrifugal relays and the pipes in the upper parts of the generator should be redesigned so that they may be covered more completely. Considerable thought should be given to the design and shape of the cooling coils to prevent their being by-passed by the heated air. There should be access openings to the exciter and pilot exciter in the special meshed screen protectors which surround those parts of the unit.

Turbines built by the Plant imeni Stalin, while of high quality, could stand some improvement. The lubrication system of the turbine bearing should have a reduction valve, and the access hatch in the boiler should be on the side rather than underneath.

Leningrad power-machinery builders should pay particular attention to the quality of automatic control and indicating equipment. Accurate machining of parts is another thing they should watch; excessive water escapes from pilot and gage cups and from various lugs and seams in the cover of the turbine itself. This is because certain parts of the drainage system are not machined properly, and cannot be repaired reliably. -- F. Loginov, Chief, Dneprostroy

ELECTRICAL EQUIPMENT PLANT LISTS ACHIEVEMENTS -- Leningradskaya Pravda, No 246, 18 Oct 49

The designers in the Elektrosila Plant, summing up their achievements this year, have noted the following:

A number of hydrogenerators were built for one of the largest electric power stations, with a saving of 30 tons of iron and 7 tons of steel castings. Two other 15,600-kilowatt hydrogenerators were built, with a saving of 2,200 kilograms of copper resulting from a new method of winding the stator coils. Asynchronous motors were produced with a power step-up of 10-20 percent, with resultant savings of 189 tons of iron, 3,300 kilograms of steel, and 68 tons of steel castings. The improvement of other types of asynchronous machines, through a reduction of dimensions, saved 460,000 rubles.

The plant supplies electrical equipment for the rolling mills of many metallurgical enterprises; designers are now trying to simplify some of this equipment. In planning a series of machines for a tube mill, the 1,500-horsepower motor was built on an eight-pole principle instead of the earlier 12-pole. This permitted great savings in insulating materials and a considerable reduction in labor consumption.

In September two more powerful engines were constructed; the weight of each, compared with analogous prewar models, was reduced by 25 percent. By 7 November the plant will release the blueprint for a new 18,000-volt hydrogenerator. It will also release the plan for a blooming-mill engine.

BUILD NEW DIAL CENTRALS -- Pravda, No 327, 23 Nov 49

The Krasnaya Zarya Plant, Leningrad, has just put a new-type step dial central into large-series production. The new central has unlimited capacity. It combines in one unit the operation of city, suburban, and office centrals, putting not only local but intercity communications on a dial system. One of the basic units of the step central is the T-70 telephonic relay. Production of this unit has been placed on a conveyer-belt basis, cutting its time of manufacture 4 days. Among the many new processes being used at the plant are pressure casting, electric welding, and electrolytic polishing. Nearly 20 conveyer lines are now in operation.

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BRIGADE MAKES 9,602 BULBS IN 12 HOURS -- Vechernyaya Moskva, No 277, 23 Nov 49

At the Order of Lenin Electric Bulb Plant, Moscow, the following shops have gone on special Stalin-Constitution-Day shifts: light bulb, special bulb, electronic-ray equipment, bulb cap, and refractories shops.

The special-bulb assembly shop is one of the largest in the plant. Every conveyer line operates in strict rhythm. Between 10,000 and 15,000 bulbs above plan are coming off the end line every day. One brigade turned out 9,602 thousand-watt bulbs in a 12-hour day, as against the norm of 6,800.

BULB PLANT FREES FLOOR SPACE -- Kommunist, No 275, 23 Nov 49

Molybdenum and platinum were formerly rough-drawn on a 30-meter line of drawing mills at the Moscow Electric Bulb Plant. As a step in the drive to free floor space for new equipment, a new mill has been designed which actually has the same work in one tenth the former space.

PLEDGE ABOVE-PLAN TRANSFORMERS -- Moskovskiy Komsomolets, No 128, 20 Oct 49

The Moscow Transformer Plant has pledged to meet the 11-month plan by 7 November and to produce above the 10 month plan, power transformers with a total capacity of 30,000 kilovolt-amperes.

Vechernyaya Moskva, No 277, 23 Nov 49

A Komsomol brigade which makes small, complex transformers at the Moscow Transformer Plant today built 34 transformers, i.e., a full shift's work, before lunch.

MOSCOW GES TO GET NEW CONTACT BREAKER -- Leningradskaya Pravda, No 261, 4 Nov 49

One of the shops of the "Elektroapparat" Plant has pledged to produce a powerful MGI-529 contact breaker. It is intended for one of the large GES which supply the city of Moscow with electric power.

A Model MGI-629 contact breaker has also been perfected.

PLASTIC-PARTS PLANT IMPROVES METHODS -- Leningradskaya Pravda, No 248, 20 Oct 49

The "Komsomolskaya Pravda" Plant, a small plant on the Vyborg side of Leningrad, is famous for its plastic parts for telephone, movie, and electrical equipment. This year, the plant has put out 30 new products, among them parts for textile machinery, pipes for the "Kinap" (Cinema Apparatus) Plant, caps for the "Sevkabel'" Plant, and hand-wheels for machine-building enterprises.

Not so long ago, press matrices were produced by machine tools, which was an expensive, labor-consuming operation. Now, the plant produces them on a 2,000-ton press. Recently, an electric-spark machine tool was installed, which makes possible a rapid and high-quality production of complex pressmould parts. In the casting shop, the automatic machines have been paired, so that one worker operates two machines simultaneously. Soon this

shop will be completely mechanized and one worker will operate all the automatic machines. In the press shop, one worker now operates three machines, whereas in the past three workers were required. The plant is now working on a high-frequency unit for heating press powders, which will change radically the technique of making plastics.

L'VOV PLANT MEETING QUOTAS -- Pravda, No 291, 18 Oct 49

The Electrical Instruments Plant, one of the largest in L'vov, reports that the majority of its workers are meeting the norms 150-200 percent.

CABLE PLANT SPEEDS PRODUCTION -- Moskovskiy Bol'shevik, No 246, 18 Oct 49

The "Moskabel'" Plant is striving to complete the Five-Year Plan with respect to production volume by 1 November.

NAME SEISMOGRAPH PLANT -- Sovetskaya Latviya, No 275, 23 Nov 49

The "Etalon" Plant, Riga, builds seismographs for the Academy of Sciences USSR.

PLANTS FAIL TO USE NEW METHODS -- Sovetskaya Latviya, No 246, 18 Oct 49

Although, in general, Latvian plants are now applying advanced production techniques such as high-speed metal cutting, automatic and ultra-short electric-arc welding, whole-stamping, and conveyer-belt assembly, a number of plants in Riga are still behind in their techniques, particularly the "REZ," "Stars," and "Gidrometpribor" plants.

On the other hand, application of new techniques has been noted in the following cases: the Ship-Repair Plant is using oxygen blasts in connection with the electric-arc method of metal cutting; the "Speks" Plant is doing thread rolling; and the "Sarkan zvaygzne" Plant has begun high-speed grinding.

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